## Northeastern University

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College of Pharmacy and Allied Health Professions Section of Pharmacology

August 12, 1992 Department of Pharmaceutical Sciences 211 Mugar Hall (617)-437-3216 (617)-266-6756 FAX

Dr. Harmon McAllister, Research Director The Council for Tobacco Research-U.S.A., Inc. 900 Third Ave. New York, NY 10022

Dear Dr. McAllister:

We are writing to determine if and when it would be appropriate to apply for research support from your program. Our research is currently supported in part from a grant by the Smokeless Tobacco Research Council (#0273, "Novel Probes for Nicotine Binding Sites"). We fully expect to be notified shortly that we are funded for our third and final year of support by the STRC (Jan. 1, 1993-Dec. 31, 1993). However, in the event that we are not, we would very much like to submit a proposal to cover at least that time period. Also, if we are funded, what is the earliest submission date to your program for a proposal with a starting date of Jan. 1, 1994?

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We have been collaborating for the last two years in synthesizing and testing novel reagents that are specific covalent ligands for the nicotinic agonist binding site. A novel feature of our ligands is that, not only are they potent agents that are covalently linked to the agonist binding site, but also they can be subsequently removed to restore function to nicotinic receptors. In addition, we have developed several selective redox reagents that will either reduce or oxidize a particular disulfide bond located in the agonist binding site of all known subtypes of nicotinic receptors. These can be used with other agents to label nicotinic receptors. One of us (RHL) is collaborating with Dr. Jon Lindstrom to use our novel reagents with his subunit-selective antibodies to develop a method of labeling all the nicotinic receptors in tissue, and then determining the subunit composition of the subtypes of receptors labeled.

We are very interested in maintaining support, primarily for our graduate students, in this research effort. Please let us know when would be the appropriate time and the proper procedure to apply for funding from your institution.

Sincerely yours,

Ralph H. Loring, Ph.D. Clinical Associate Professor

Ralph H. Long

Pharmacology

Dr. Gerald S. Jones, Jr. Assistant Professor

Medicinal Chemistry